

## ABSTRACT

The present application provides a biodegradable polyurethane elastomer comprising soft segments A and B, and hard segment C, wherein: the  
5 segment A is formed from poly( $\beta$ -hydroxybutyrate) diol and optional one or more components selected from the group consisting of poly(lactic acid)diol, polyglycolide diol, polylactide diol, polycaprolactone(PCL) diol and poly(lactic/glycolic acid) diol; the segment B is formed from  
10 polyethylene glycol; the segment C is formed from one or more diisocyanate selected from the group consisting of 1,6-hexamethylene diisocyanate, isophorone diisocyanate and lysine diisocyanate; and the molar ratio of these segments are:  $(A+B)/C = 0.8$  to  $1.2$ ;  $A/B = 0.1$  to  $10$ ; and the amount of the poly- $\beta$ -hydroxybutyrate units in the segment A is  
15 10-100 mol%.